

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/GB2005/000074

International filing date (day/month/year)
12.01.2005

Priority date (day/month/year)
12.01.2004

International Patent Classification (IPC) or both national classification and IPC
G06F17/30

Applicant
LIGHTFOOT SOLUTIONS LIMITED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 56.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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10/586004

International application No.
PCT/GB2005/000074

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

AP20 Rec'd PCT/PTO 12 JUL 2006

Box No. 1 Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2005/000074

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:
- ☒ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ not paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3:
- ☐ complied with.
 - ☒ not complied with for the following reasons:
see separate sheet
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☒ all parts.
 - ☐ the parts relating to claims Nos. .

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	3-5, 8-10, 12-19
	No: Claims	1,2,6,7, 11
Inventive step (IS)	Yes: Claims	
	No: Claims	1-19
Industrial applicability (IA)	Yes: Claims	1-19
	No: Claims	

2. Citations and explanations
see separate sheet

10/586004

AP20 Rec'd PCT/PTO 12 JUL 2006

International application No.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

PCT/GB2005/000074

Reference is made to the following documents:

- D1: PENIX J ET AL: "Automating component integration for web-based data analysis" AEROSPACE CONFERENCE PROCEEDINGS, 2000 IEEE MARCH 18-25, 2000, PISCATAWAY, NJ, USA, IEEE, vol. 4, 18 March 2000 (2000-03-18), pages 465-473, XP010517658 ISBN: 0-7803-5846-5
- D2: ZUR MUEHLEN M ET AL: "Workflow-based process monitoring and controlling - technical and organizational issues" SYSTEM SCIENCES, 2000. PROCEEDINGS OF THE 33RD ANNUAL HAWAII INTERNATIONAL CONFERENCE ON JAN 4-7, 2000, PISCATAWAY, NJ, USA, IEEE, 4 January 2000 (2000-01-04), pages 1972-1981, XP010545465 ISBN: 0-7695-0493-0
- D3: LUO QIONG ET AL: "Active query Caching for Database web Servers" THIRD INTERNATIONAL WORKSHOP ON WORLD WIDE WEB AND DATABASES WEBDB 2000, DALLAS, TX, US, [Online] 18 May 2000 (2000-05-18), - 19 May 2000 (2000-05-19) pages 92-104, XP002345156 Lecture Notes in Computer Science, Vol.1997, Springer-Verlag Berlin, DE ISBN: 3-540-41826-1 Retrieved from the Internet: URL: <http://www.cs.wisc.edu/%7Esekar/publications.html> [retrieved on 2005-09-15]

Re Item IV

Lack of unity of invention

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims 1-10

system and method for extracting user selected data from a database based on configuration data comprising measure and dimension data (see description, pages 3-11)

2. claims 11-19

method for evaluating a database query based on cached query results (see

description, pages 12-17)

The problem to be solved by the first invention may be regarded as retrieving data based on a user request from data stores with heterogeneous configurations, whereas the problem to be solved by the second invention may be regarded as speeding up data retrieval based on a user query for a previously requested data chart.

The common concept between the first and second inventions is the fact that data is retrieved from a database based on a user request. This concept is of course well known, see e.g. D1 page 466 left-hand column second and third paragraphs and figs. 2 and 3. It follows that this common concept is not inventive.

No further common concept or further underlying common concept of the two groups of claims can be identified. Hence, there are no common or corresponding special technical features of the two groups of claims according to Rule 13.2 PCT. Since the common concept identified above is the only common concept, and the problems solved are distinct and different, there is no single general inventive concept according to Rule 13.1 PCT to link the two inventions in order to form unity of said inventions.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-19 is not new in the sense of Article 33(2) PCT or does not involve an inventive step in the sense of Article 33(3) PCT.

First invention

- 1.1. The document D1 discloses (the references in parentheses applying to this document):

A system for extracting user selected data from a database comprising:

- a. means for storing configuration data defining how user selected data is to be

- extracted in response to a user request for data (page 466 left-hand column line 26; implicit in "component ... specification" on page 466 right-hand column lines 17-22);
- b. means for generating a database query form [*sic*] the user request using the configuration data (implicit in page 468 left-hand column line 13, "data analysis application" and fig. 2, "Data Analysis Filter");
 - c. means for extracting data in response to the query (fig. 2, "Data Analysis Filter");
 - d. means for supplying the extracted data to the user (fig. 2, "Data Visualization Device");
 - e. wherein the database query comprises data defining a measure to be displayed (page 467 left-hand column line 36, "data source") and data defining any dimensions for that measure selected by the user (page 467 left-hand column line 40, "data fields"), and the data defining the measure and dimensions comprise a portion of the configuration data (implicit in D1 as any query generated by the system would contain table and attribute data extracted from the "component specification" configuration data mentioned in the passages cited under feature a).

The subject-matter of **claim 1** is therefore not new (Article 33(2) PCT).

- 1.2. Dependent **claims 2-5** do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), see documents D1 and D2 and the corresponding passages cited in the search report.
- 1.3. Method **claims 6-10** contain features which correspond to features of **claims 1-5**. Therefore, the reasoning under 1.1 and 1.2 applies to **claims 6-10 *mutatis mutandis***.

Second invention

- 1.4. The document D3 discloses (the references in parentheses applying to this document):

A method for supplying a set of chart data from a database to a user in response to a user input comprising the steps of:

- storing a number of sets of chart data in a cache memory (implicit in page 95 third paragraph);
- determining whether a user input corresponds to a request for a set of chart data stored in the cache memory (page 95 lines 13-14); and
- supplying a set of chart data from the cache memory in dependence on the result of the determination (page 95 lines 14-15).

The subject-matter of **claim 11** is therefore not new (Article 33(2) PCT).

- 1.5. Dependent **claims 12-19** do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), as the claims merely refer to well-known database cache administration and replacement techniques which would be straightforward to the skilled person.